Amendments to the Claims:

Please amend the claims as indicated in the following listing of claims, which replaces all prior versions, and listings of claims in the application.

Listing of Claims:

1. – 10. (Canceled)

11. (Currently Amended) An improved vascular catheter ~~system~~ of the type including (a) a tubular catheter body having a proximal tubular portion, a distal tubular portion, and a single lumen therethrough, and (b) a drive cable rotatably received in the lumen, wherein the improvement comprises an intermediate tubular portion formed on the tubular catheter body of a transitional material between the proximal tubular portion and the distal tubular portion, the transitional material being of a higher flexural modulus than the distal tubular portion and of a lower flexural modulus than the proximal tubular portion.

12. (Currently Amended) The improved vascular catheter ~~system~~ of claim 11, wherein the proximal tubular portion comprises a material taken from the group consisting of natural polymers, synthetic polymers, and plastic materials.

13. (Currently Amended) The improved vascular catheter ~~system~~ of claim 11, wherein the intermediate tubular portion comprises a material taken from the group consisting of nylons, polyester, polyimides, polyolefins, and blends of such materials.

14. – 17. (Previously Canceled)

18. (Currently Amended) The improved vascular catheter ~~system~~ of claim 11, wherein the proximal tubular portion comprises a material taken from the group consisting of silicone rubber, natural rubber, polyvinylchloride, polyurethanes, polyesters, polyethylene, polytetrafluoroethylene (PTFE), and polyetheretherketone (PEEK).

19. (Currently Amended) The improved vascular catheter ~~system~~ of claim 11, wherein the intermediate tubular portion is adhesively bonded with the proximal tubular portion and with the distal tubular portion.

20. (Currently Amended) The improved vascular catheter ~~system~~ of claim 11, wherein the intermediate tubular portion is thermally bonded with the proximal tubular portion and with the distal tubular portion.

21. (Currently Amended) The improved vascular catheter ~~system~~ of claim 11, wherein the intermediate tubular portion has a length between 20 and 200 mm.

22. (Currently Amended) The improved vascular catheter ~~system~~ of claim 11, wherein the intermediate tubular portion has a length between 40 and 100 mm.

23. (Currently Amended) The improved vascular catheter ~~system~~ of claim 11, wherein the intermediate tubular portion is connected with the distal tubular portion at a point between about 100 and 400 mm from a distal end of the tubular catheter body.

24. (Currently Amended) The improved vascular catheter ~~system~~ of claim 11, wherein the intermediate tubular portion is connected with the distal tubular portion at a point approximately 150 mm from a distal end of the tubular catheter body.

25. (Currently Amended) The improved vascular catheter ~~system~~ of claim 11, wherein the intermediate tubular portion has a flexural modulus between 50 and 220 kpsi.

26. (Currently Amended) The improved vascular catheter ~~system~~ of claim 11, wherein the intermediate tubular portion has a flexural modulus between 150 and 190 kpsi.

27. (Currently Amended) A vascular catheter ~~system~~ comprising:

a tubular catheter body having a proximal tubular portion, an intermediate tubular portion, a distal tubular portion, and a single lumen therethrough, wherein the intermediate tubular portion is formed on the tubular catheter body of a transitional material between the proximal tubular portion and the distal tubular portion, the transitional material being of a higher flexural modulus than the distal tubular portion and of a lower flexural modulus than the proximal tubular portion; and

a drive cable rotatably received in the lumen.

28. (Currently Amended) The vascular catheter ~~system~~ of claim 27, wherein the intermediate tubular portion has a flexural modulus between 50 and 220 kpsi.

29. (Currently Amended) The vascular catheter ~~system~~ of claim 27, wherein the intermediate tubular portion has a flexural modulus between 150 and 190 kpsi.

30. (Currently Amended) The vascular catheter ~~system~~ of claim 27, wherein the proximal tubular portion comprises a material taken from the group consisting of natural polymers, synthetic polymers, and plastic materials.

31. (Currently Amended) The vascular catheter ~~system~~ of claim 27, wherein the proximal tubular portion comprises a material taken from the group consisting of silicone rubber, natural rubber, polyvinylchloride, polyurethanes, polyesters, polyethylene, polytetrafluoroethylene (PTFE), and polyetheretherketone (PEEK).

32. (Currently Amended) The vascular catheter ~~system~~ of claim 27, wherein the intermediate tubular portion comprises a material taken from the group consisting of nylons, polyester, polyimides, polyolefins, and blends of such materials.

33. (Currently Amended) The vascular catheter ~~system~~ of claim 27, wherein the intermediate tubular portion is adhesively bonded with the proximal tubular portion and with the distal tubular portion.

34. (Currently Amended) The vascular catheter ~~system~~ of claim 27, wherein the intermediate tubular portion is thermally bonded with the proximal tubular portion and with the distal tubular portion.

35. (Currently Amended) The vascular catheter ~~system~~ of claim 27, wherein the intermediate tubular portion has a length between 20 and 200 mm.

36. (Currently Amended) The vascular catheter ~~system~~ of claim 27, wherein the intermediate tubular portion has a length between 40 and 100 mm.

37. (Currently Amended) The vascular catheter ~~system~~ of claim 27, wherein the intermediate tubular portion is connected with the distal tubular portion at a point between about 100 and 400 mm from a distal end of the tubular catheter body.

38. (Currently Amended) The vascular catheter ~~system~~ of claim 27, wherein the intermediate tubular portion is connected with the distal tubular portion at a point approximately 150 mm from a distal end of the tubular catheter body.